Bachelor of Science in Chemical Engineering (CH E – B164 Bioengineering)
Summer 2020 through Spring 2021 – Total Credit Hours: 125

This flowchart is not an official check sheet of degree requirements. It is meant to be used as a supplemental visual guide to be used along with the official University of Oklahoma degree check sheet.

FRESHMAN

Fall 17 Hours
- MATH 1914 Calculus I
- ENGR 1411 or 3511 Freshman / Transfer Engineering Experience
- ENGL 1113 English Composition
- BIOL 1124 Introductory Biology
- CHEM 1315 or CHEM 1335 General Chemistry

Spring 16 Hours
- MATH 2924 Calculus II
- PHYS 2514 General Physics for Engr & Science Majors
- ENGL 1213 or EXPO 1213 English Comp or Expository Writing
- CHEM 1415 or CHEM 1435 or CHEM 1425 (H) General Chemistry

SOPHOMORE

Fall 14 Hours
- MATH 2934 Calculus III
- PHYS 2524 General Physics for Engr & Science Majors
- CHEM 2033 Chemical Engineering Fundamentals
- MATH 3113 Differential Equations

Spring 16 Hours
- CHEM 3423 Physical Chemistry I
  Prereq: CHEM 1415
  Coreq: MATH 2924 or 2423
- CH E 2003 Intro. to CH E Computing
- CH E 3113 Momentum, Heat & Mass Transfer I
- CH E 3123 Momentum, Heat & Mass Transfer II
- CH E 3203 Chemical Engineering Thermo.
  Additional Prereq: CH E 2033 & MATH 2934 or 2443

JUNIOR

Fall 16 Hours
- CHEM 3421 Physical Chemistry Lab
- CH E 3473 Chemical Engineering Core Elective*
  Choose either CHE 5243 (S) or CHE 4203 (F)
- CH E 3123 Unit Operations
- CH E 3333 Separation Processes
- CH E 4473 Kinetics
  Additional Prereq: MATH 3113 & CH E 3473

Spring 14 Hours
- Approved Elective
- Approved Elective
- CH E 3313 Structure & Properties of Materials (was 2313)
- CH E 3423 Chemical Engineering Core Elective*
  Choose either CHE 5243 (S) or CHE 4203 (F)
- CH E 4262 Chem. Engr. Design Lab I
- CH E 4253 Process Design & Safety
- CH E 4153 Process Dynamics & Control
- Technical Elective I

SENIOR

Fall 16 Hours
- Approved Elective
- Approved Elective
- P SC 1113 Am. Fed. Govt.
- ENGR 2431 Electrical Circuits I
  Prereq: MATH 2924 or 2433
- ENGR 3431 Electromechanical Systems

Spring 16 Hours
- CH E 4273 Advanced Process Design
- CH E 4203 Applied Engr Statics
  Prereq: PHYS 2514
  Co-req: MATH 2934 or 2433

Key and Important Notes

- H = Honors option
- ★ At least one of these Gen. Ed. courses must be 3000-4000 level.
- Foreign Language: 2 semesters college level or 2 years of high school.
- Shaded courses offered once per year.
- HS History Deficiency
- *Bioengineering Core Electives Note:
  CHE4203: Pre-req PHYS2524 and MATH3113
  CHE5243: CHE3123 or permission of Instructor

Choose between CHEM3653, CHEM3753, MBIO3813, BIOL3103, BIOL3113, BIOL3333, BIOL4843, CHE5243, CHE4203, CHE5293, CHE5373.